

# Teachers' Attributions and Emotions for Their Teaching over a Kindergarten Year

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## Abstract

This study aimed to investigate (a) kindergarten teachers' attributions and emotions for their subjectively estimated successful or unsuccessful teaching in their classes over a year in kindergarten, and (b) the role of the intuitive and attributional appraisals of teaching in the generation of the emotions and teaching expectations. The sample comprised 204 kindergarten teachers (194 female, 10 male) from state schools of various towns of Greece, who completed the scales at the middle of a kindergarten year. The results showed that (a) attributions differed between the perceived successful and unsuccessful teaching (successful and unsuccessful teaching was mainly attributed to internal and unstable factors, respectively), while locus of causality, followed by stability, was the most powerful attributional dimension in discriminating the two groups of teaching, (b) the teachers, who estimated their teaching as successful, compared to teachers, who estimated their teaching as unsuccessful, felt better, particularly in the context-, task-, and goal-related emotions, (c) attributional and, predominately, intuitive appraisal of teaching influenced the formulation of the emotions, particularly for the perceived unsuccessful teaching, (d) all of the attributional dimensions influenced the emotions, while their relative predictive power varied across emotions and between perceived successful and unsuccessful teaching, and (e) attributions and intuitive appraisal of teaching had unique and complimentarily effect on teaching expectations. The findings are discussed with respect to their implications in education and future research.

## Keywords

Attributions; Emotions; Expectations; Kindergarten; Teaching

## Introduction

In any teaching situation, a teacher has to regulate his / her cognitive, emotional and motivational processes (Boekaerts & Corno, 2005; Carson & Templin, 2007; Efklides & Volet, 2005; Hargreaves, 1998; Sutton, 2004; Sutton & Wheatley, 2003). However, although recent research on teachers' cognition has been developed and expanded, there is little research, particularly in kindergarten, about how teachers' cognitions relate to

their emotional experiences in teaching practices, the relationship between teachers' emotions and motivation, and how integral the interactive effects of these three concepts are in teacher development (Hoy, Davis, & Pape, 2006; Reyna & Weiner, 2001; Stephanou & Sivropoulou, 2008; Stephanou & Tsapakidou, 2007; Sutton & Mudrey-Camino, 2003). In addition, previous investigations have examined the importance of teachers' cognition and emotions for students' achievement, while much less is known about teachers' attributions and emotions for their own behavior in classes (Clark & Artiles, 2000; McCormick & Barnett, 2011; McCormick & Shi, 1999; Pintrich & Schunk, 2002; Stephanou, 2005; Stephanou & Mastora, 2008).

Accordantly, this study examined teachers' attributions and emotions for their subjectively estimated successful or unsuccessful teaching performance over a kindergarten year. The basis of this study was Weiner's (1986, 1992, 2006) attribution theory, which, incorporating cognitive appraisals and emotions, is helpful in understanding teacher motivation and behaviour (see Hewstone & Antaki, 2001; Pintrich & Schunk, 2002; Schunk & Zimmerman, 2006).

According to Weiner's (1992, 2006) theory of achievement motivation and emotions, although an achievement behavior could be attributed to infinite number of attributions, ability (aptitude or acquired skill) and effort (short- and long- term) are the most dominants. The perceived causes of past achievement behaviour are influenced by environmental (e.g., social norms, situational conditions) and personal (e.g., attributional biases, self-beliefs, schemata) factors (Weiner, 2001, 2002). Attributions, then, are categorized into attributional dimensions of locus of causality (internal /external to the performer), stability (stable/unstable over time) and controllability (controllable/uncontrollable by the performer or others) which have psychological and behavioral

consequences. Emotions and expectations, in turn, influence actual future performance (Weiner, 2001, 2005).

The achievement outcome differentiates the attributional pattern. In sum, people tend to attribute their successful performance to themselves (internal, stable, personal controllable, and external uncontrollable), and their unsuccessful performance to others and situational factors, in order to enhance and protect themselves, respectively (Fiedler, Semin, Finkenauer, & Berkel, 1995; Forsterling, 1988; Kashima & Triandis, 1986; Schunk, Pintrich, & Meece, 2008; Stephanou, 2004, 2005; Stephanou & Tatsis, 2008; Weiner, 2001, 2002; Ybarra & Stephan, 1999).

Regarding the emotions, this theory focuses on how specific emotions, such as sadness and anger, are elicited, and on the motivational functions they serve in particular achievement situation (Clore & Ortony, 2010; Frijda, 1993, 2007; Smith & Kirby, 2000; Weiner, 2002, 2005). More precisely, there are 'outcome-dependent' emotions (e.g., happiness, pleasure, sadness) which are the initial and strongest response to the valence of the achievement outcome-if it is positive, a performer feels happy, whereas if it is negative, he/she feels sad-, and 'attribution-dependent' emotions (e.g., anger, encouragement) that are influenced by the causal explanation for the performance (Oatley & Jenkins, 1998; Weiner, 2001).

Although all causal dimensions are related to the experienced emotions for past performance, their prevalence differs across the various emotions. Locus of causality, stability and controllability mainly influences the self-esteem (pride)-, expectancy (hope, confidence)- and social (anger, gratitude, guilty)-related emotions, respectively (Berndsen & Manstead, 2007; Schunk et al., 2008; Weiner, 1995, 2005, 2006).

### ***The Antecedents of Teachers' Emotions in Classroom Teaching***

Although the antecedents of emotional experience in classroom situations are various and, probably, infinitive, the intuitive appraisal of teaching, which refers to teachers' perceptions of how good their teaching was, and the attributional appraisal of teaching, which is concerned with the perceived causes for teaching performance, are important sources of teachers' emotions (see Reyna & Weiner, 2001; Smith & Lazarus, 1990; Stephanou & Tsapakidou, 2007; Sutton & Wheatley, 2003; Trope & Guant, 2005).

As above mentioned, the emotion process begins with some kind of appraisal that involves the interpretation of its significance for the performer's motives, goals or concerns (Ellsworth & Scherer, 2003; Lazarus, 1991; Pekrun, Maier, & Elliot, 2009; Scherer, 2001). For example, positive and negative emotions arise from goal congruence (successful teaching) and goal incongruence (unsuccessful teaching), respectively. Then, the secondary attributional appraisal of teaching differentiates and verifies this initial emotional experience. For example, if one teacher believes that bad teaching was due to her/his inadequate ability, then she/he may experience hopelessness, while the teacher may feel confidence and hope if she/he considers his/her own high ability as cause for the good teaching (see Hoy et al., 2006; Stephanou & Tsapakidou, 2007; Weiner, 2006).

### ***Importance of Teachers' Attributions and Emotions for Motivation and Behaviour***

Investigating how teachers appraise their teaching in classes, by evaluating and by attributing causes, contributes in understanding their motivation and behaviour, since these appraisals reflect what the stimulus means to the individual and whether it is good or bad (Leary, 2000; Smith & Lazarus, 1990; Trope & Gaunt, 2005). Whether teachers perceive their teaching or classroom situations as positive or negative, and which explanations or interpretations they make about the teaching influence their emotions, motivation and behaviour (Jesus & Lens, 2005; Peterson & Steen, 2005; Pintrich & Schunk 2002; Stephanou & Sivropoulou, 2008; Weiner, 2002). For example, teachers experience pride, except future success, continue to try, and enhance the possibilities of future success, when a positive situation is attributed to internal, controllable and stable factor, such as constant effort or ability (Bruning, Schraw, & Running, 1999; Stephanou & Mastora, 2008; Weiner, 1992, 2002). Similarly, if a teacher believes, that her/his students' good behaviour was the significant factor for their good teaching, then she/he may experience gratitude, continue to try and succeed. In contrast, anger combines distress over the undesired unsuccessful teaching with perceiving the other (students) as responsible for it; attributional pattern which does not facilitate future successful teaching (see Ortony, Clore, & Collins, 1988; Weiner, 1995, 2006). In a similar way, by attributing failure to internal, personal controllable and stable factors (e.g., lack of

capacity, lack of ability, lack of long-term effort), teachers minimize their personal efficacy, maximize their expectations of future failure, increase their possibilities of future failure, and experience shame, incompetence and, probably, hopelessness, the feeling that no amount of effort can lead to success (Jesus & Lens, 2005; Peterson, Maier, & Seligman, 1993; Peterson & Steen, 2005; Seligman, 2002; Stephanou & Tsapakidou, 2007).

Emotions are inherently and intensely experienced in the context of classroom teaching, and so they are needed to be included in any comprehensive discussion of teachers' motivation and behaviour (Astleitner, 2000; Frenzel, Goetz, Lüdtke, Pekrun, & Sutton, 2009; Hargreaves, 2000; Lambert, McCarthy, O'Donnell, & Wang, 2009; Pekrun, 2005, 2006; Pekrun, Goetz, Frenzel, Barchfeld, & Perry, 2011; Sutton & Wheatley, 2003). Teachers' such emotional experience is considered precursor of their future behavior because it influences their self identity and motivation (Schutz & DeCuir, 2002; Somech, & Drach-Zahavy, 2000). For example, teachers, who are constantly frustrated or sad by disruptive students or ineffective administration, are less intrinsically motivated, express a lack of enthusiasm for cultivating positive relationships with their students and report becoming tolerant, and less caring (Blase, 1986.). Teachers' emotions in classes also influence cognitive information processing, quality of thinking, categorizing, strategies in pursuing the goals and self-regulation (see Boekaerts, Pintrich, & Zeidner, 2000; Efklides & Volet, 2005; Isen, 1993; Parrot & Spackman, 2000). According to Sutton and Wheatley (2003), teachers who experience positive emotions might generate more teaching ideas and strategies that might contribute in developing 'broad minded coping' skills (Fredrickson, 2001, p. 223). These coping skills facilitate teachers to achieve their goals, such as teaching well and help students to learn. Yet, teachers' emotions have important consequences in judgments and behaviours (see Bless, 2003; Parrott, 2003; Weiner, 2005, 2006). For example, in experimental study contacted by Keltnner, Ellsworth and Edwards(1993), angry and sad students attributed hypothetical misfortunes to the other and situational factors, respectively.

Furthermore, teachers' attributions for situations in the classroom are of primary importance for students' motivation, achievement, and well-being, since these

attributions comprise teachers' thoughts, emotions and behaviour towards students (Bronk, 2001; Jennings & Greenberg, 2009; Mueller & Dweck, 1998; Schunk et al., 2008; Stephanou, 2005; Weiner, 2002). For example, teachers, who perceive that students' failure was due to their laziness, are unlikely to provide the appropriate instructional or emotional support (see Reyna & Weiner, 2001). Heyman, Dweck and Cain (1992) found that kindergarten students displayed a helplessness response to the teacher's criticism in their project, and they were likely to make negative judgments about themselves.

Similarly, teachers' emotions in classes are a significant factor of students' motivation, behavior and well-being (Boekaerts, 2007; Davis, 2003; Furrer & Skinner, 2003; Taxer & Frenzel, 2012; Vauras, Salonen, Lehtinen, & Kinnunen, 2009). Students are often aware of and influenced by teachers' negative emotions in classes (Glen, 2011; Hamre & Pianta, 2006; Jarvenoja, & Jarvela, 2005). Indeed, a study by Thomas and Montomery (1998) reports that teachers' yelling made the children to feel small, ashamed, guilty, embarrassed and hurt. Kindergarten teachers' expression of anger toward their students aroused students' upset rather than conforming to teachers' demands (Kounin, 1977). In addition, teachers' negative emotions are meaningful predictors of students' development. For example, Hamre and Pianta (2001) found that kindergarten teachers' experience of negative emotions for a student influence student social and academic outcomes through at least fourth grade. In contrast, teachers' positive emotions positively affected the students of various grade levels regarding motivation, achievement and social behavior in classes (Turner, Midgley, Meyer, Gheen, Anderman, & Kang, 2002; Turner, Meyer, Midgley, & Patrick, 2003; Wentzel, 1996; Wong & Dornbusch, 2000).

### ***Aim and Hypotheses of this Study***

This study aimed to examine, firstly, kindergarten teachers' attributions and emotions for their successful and unsuccessful estimated teaching in their classes over a kindergarten year, and, secondly, the role of the intuitive and attributional appraisals of the teaching in the formulation of the emotions and teaching expectations.

The hypotheses of this study were the following.

The perceived successful and unsuccessful teaching over the current kindergarten year will be attributed

by the teachers to self-related factors (internal, stable, personal controllable, external uncontrollable) and other-related factors (external, unstable, external controllable), respectively (Hypothesis 1a). Locus of causality, in comparison to other attributional dimensions, will be the most powerful factor in discriminating the group of teachers with the perceived successful teaching from the group of teachers with the perceived unsuccessful teaching (Hypothesis 1b).

The teachers will experience various emotions for their perceived successful and unsuccessful teaching in their classes over the current kindergarten year (Hypothesis 2a). The perceived successful teaching and unsuccessful teaching over the current kindergarten year will be associated with intense positive and negative emotions (mainly, outcome-dependent), respectively (Hypothesis 2b).

Both appraisals of teaching will have positive effects on the generation of the emotions in the perceived successful and, mainly, unsuccessful teaching (Hypothesis 3a). Intuitive and attributional appraisal of teaching will be mainly associated with the outcome-dependent affects and the attribution-dependent affects, respectively (Hypothesis 3b). Locus of causality, stability and controllability for the perceived successful/ unsuccessful teaching will mainly influence the generation of the self-, expectancy- and social-related emotions, respectively (Hypothesis 3c).

Intuitive and attribution (mainly, stability) appraisals of teaching will positively influence teaching expectations, particularly in the perceived unsuccessful teaching (Hypothesis 4).

## Method

### *Participants*

A total of 204 kindergarten teachers (194 female, 10 male) from state schools of various towns of Greece participated in the study. Their average age was 30 years, ranging from 26 to 58. Their teaching experience ranged from 2 to 23 years, and the mean number of years they had been employed at this kindergarten was 8.20 ( $SD = 7.60$ ). The distribution of the participants regarding gender is typical for Greek Kindergarten teachers. Of them, 116 and 88 estimated their teaching in their class over the current kindergarten year as successful and unsuccessful, respectively (see measurements below).

### *Measurements*

*Emotions.* The scale of the teachers' experienced emotions in their classes consisted of eighteen emotions: happiness, satisfaction, pleasure, pride, encouragement, confidence, calmness, not angry-angry, flow-not flow, cheerfulness, exciting, not irritated-irritated, hope, competence, enjoyment, anxiety, enthusiasm and not boredom-boredom. More precisely, the teachers were asked to indicate the extent to which they usually experienced each of the above eighteen emotions as a function of their perceived teaching performance in their class over the current kindergarten year. The emotions had the form of adjectives, with the positive pole having the high score of 7 and the negative pole having the low score of 1 (e.g., happy 7 6 5 4 3 2 1 unhappy). The construction of the scale was based on previous similar researches (see Pekrun et al., 2011; Schutz & DeCuir, 2002; Sutton & Wheatley, 2003; Weiner, 1992, 1995, 2001, 2005, 2006), and it is a valid and reliable research instrument in studying experienced emotions for achievement behavior in education in Greek population (see Stephanou, 2004, 2011; Stephanou & Tatsis, 2008; Stephanou, Kariotoglou, & Ntinis, 2011; Stephanou & Tsapakidou, 2007).

*Attributions for the perceived successful and unsuccessful teaching.* The Causal Dimension Scale II (CDSII, McAuley, Duncan, & Russell, 1992) was used to measure attributions for teaching. The wording of the items was adapted so that the teachers' attributions for the perceived successful and unsuccessful teaching could be assessed. Specifically, the teachers mentioned the most important factor, which, according to their judgement, influenced the quality of their teaching in their class over the current kindergarten year, and classified that factor along the four causal dimensions of locus of causality (internal / external), stability (stable / unstable over time), personal controllability (controllable / uncontrollable by the performer) and external controllability (controllable / uncontrollable by others). Each of the attributional dimensions consists of three items, while responses ranged from 1 = negative pole to 9 = positive pole (e.g., 1 = unstable to 9 = stable). This scale is a reliable and valid research instrument in examining attributions for achievement behaviour in Greek population (see Stephanou, 2004, 2005; Stephanou & Sivropoulou, 2008; Stephanou & Tatsis, 2008). Cronbach's alpha value was .78, .83, .79 and .82 for locus of causality, personal controllability, stability and external controllability, respectively.

*Successful or unsuccessful teaching.* Teachers' perceptions

of the quality of their teaching in their class over the kindergarten year were estimated by responding to a four items scale (e.g., "How well do you think you teach in your class in the current kindergarten year?", "How good your teaching is in your class in the current kindergarten year?"). Responses ranged from 1 =not at all good / well to 7 = excellent.

The successful or unsuccessful teaching was estimated by the teachers themselves by completing the teaching scale twice. More precisely, the participants indicated, first, how successful they thought their teaching in their class in the current kindergarten year was and, then, the lowest mark over which their teaching in their class would be considered successful. Teachers whose the perceived current teaching mark was lower than the indicated as successful formed the group of unsuccessful teaching, while those whose the perceived current teaching was equal or higher than the indicated one as successful formed the group of successful teaching. The scale was adapted from existent researches (see Stephanou, 2004, 2008). Cronbach's alpha was .86.

*Teaching Expectations.* The teachers' teaching expectations were examined via the scale of the perceived current quality of the teaching. The wording of the questions for the two scales was the same except for the verb tense (e.g., "How well do you think you will teach in your class in the rest of this kindergarten year?", "How good will your teaching be in your class in the rest of this kindergarten year?"). This scale, in addition is similar to previous researches (see Eccles & Wigfield, 2002; Pintrich & Schunk, 2002; Stephanou & Tsapakidou, 2007; Wigfield & Eccles, 2000). Cronbach alpha was .83.

*Personal information.* Teachers were asked to respond to a short set of questions about personal factors such as gender, age and teaching experience.

#### Procedure

To ensure that the kindergarten teachers had good time to form an impression about the quality of their teaching in their class over the kindergarten year, they

completed the scales at the middle of the kindergarten year. Also, to ensure that any relation among teaching expectations, attributions and emotions was not due to procedure used, the participants completed, first, the teaching expectations scale, then, the emotions scale and, finally, the attributions scale. To match the scales that were responded by the same teacher, the teachers were asked to choose a code name and use it on all the questionnaires. The teachers were assured of anonymity and confidentiality.

#### Results

##### *Attributions and Emotions for the Perceived Successful and Unsuccessful Teaching*

The results from the repeated measures MANOVA (using the Wilks's lambda estimate) with the four attributional dimensions for teaching as within-subjects factor and the perceived teaching (successful / unsuccessful) as between-subjects factor revealed significant effect of the attributional dimensions,  $F(3, 200) = 48.20, p < .01, \eta^2 = .42$ , significant effect of the perceived teaching,  $F(1, 202) = 426.60, p < .01, \eta^2 = .67$ , and significant multivariate effect,  $F(3, 200) = 83.50, p < .01, \eta^2 = .44$ .

The results from subsequent repeated measures ANOVAs, examining differences between attributions within each group of perceived teaching (successful / unsuccessful), post hoc pairwise comparisons and the mean scores (Table 1) revealed that the teachers, who estimated their teaching in their class as successful, made personal controllable, stable, external uncontrollable and, mainly, internal, attributions. In contrast, the teachers, who estimated their teaching in their class as unsuccessful, made external, personal controllable, external controllable and, predominately, unstable attributions.

The results from Anovas with the perceived teaching (successful/unsuccessful) as between subjects factor and each of the attributional dimensions as dependent variable showed significant effects. The results from

TABLE 1 DISCRIMINANT ANALYSIS FOR TEACHERS' ATTRIBUTIONS FOR THE PERCEIVED SUCCESSFUL AND UNSUCCESSFUL TEACHING OVER THE KINDERGARTEN YEAR

	Successful teaching		Unsuccessful teaching		Wilks' Lambda	F	Discriminating power
	Mean	SD	Mean	SD			
Locus of causality	7.94	1.08	3.89	1.63	.31	449.72	.84
Personal controllability	7.88	.74	5.10	1.85	.48	214.85	.64*
Stability	7.42	1.23	3.25	2.02	.37	330.35	.72
External controllability	4.40	2.35	5.92	2.21	.90	21.92	-.18

Note: All F(1, 202)- values are significant at the .01 level of significance; \*Personal controllability had no significant contribution in discriminating the two groups of teachers.

TABLE 2 DISCRIMINANT ANALYSIS FOR TEACHERS' EMOTIONS FOR THE PERCEIVED SUCCESSFUL AND UNSUCCESSFUL TEACHING OVER THE KINDERGARTEN YEAR

	Successful teaching		Unsuccessful teaching		Wilks' Lambda	F	Discriminating power	Cohen's d
	Mean	SD	Mean	SD				
Happiness	5.55	.87	4.45	1.47	.81	47.07	.54	.88
Satisfaction	5.75	.82	4.31	1.40	.69	87.26	.73	1.10
Pleasure	5.65	.80	4.31	1.40	.73	73.65	.67	.92
Pride	5.55	1.07	4.50	1.41	.84	36.45	.53*	.78
Encouragement	5.48	.93	4.40	1.44	.83	41.28	.60*	.83
Confidence	5.79	.96	4.59	1.62	.82	43.43	.44*	.85
Calmness	5.17	1.32	4.22	1.51	.89	22.57	.37	.44
Not angry-angry	5.62	1.16	4.59	1.47	.86	31.10	.42*	.79
Flow- not flow	5.86	1.04	4.81	1.56	.86	32.50	.43*	.75
Cheerfulness	5.96	.85	4.72	1.42	.74	67.58	.64	.94
Exciting	5.86	.90	4.63	1.75	.82	41.93	.40*	.84
Not irritated - irritated	5.68	1.05	4.86	1.82	.92	16.45	.36*	.55
Hope	5.75	.97	4.86	1.64	.89	23.56	.38	.64
Competence	5.79	.92	4.63	1.64	.83	40.32	.40*	.82
Enjoyment	5.55	.85	4.50	1.59	.84	36.45	.49*	.78
Anxiety	5.27	.94	4.36	1.43	.87	29.66	.40*	.72
Enthusiasm	5.75	.93	4.45	1.50	.77	57.47	.59	.94
No boredom-boredom	5.80	.96	4.72	1.60	.85	34.53	.50	.78

Note: All F(1, 202)- values are significant at the .01 level of significance; The nature of the emotions is positive and negative in the perceived successful and unsuccessful teaching group, respectively; \*Emotions had no significant contribution in discriminating the two groups of teachers.

Discriminant analysis (Table 1), with stepwise method, confirmed the univariate effects, and, in addition, showed that locus of causality, Cohen's  $d^1 = 1.70$ , discriminating power = .84, followed by stability, Cohen's  $d = 1.61$ , discriminating power = .72, and external controllability, Cohen's  $d = .58$ , discriminating power = -.18, was the most powerful factor in discriminating the group of teachers with the perceived successful teaching from the group of teachers with the perceived unsuccessful teaching. However, personal controllability had no significant contribution in discriminating the two groups of teachers, Cohen's  $d = 1.42$ .

Hypotheses 1a and 1b were partly confirmed by the above findings.

The results from the two repeated measures ANOVAs, one for each group of the perceived teaching (successful / unsuccessful) in the classes over the current kindergarten year, in which emotions was the within-subjects factor, showed that the teachers experienced various emotions and a variety of intensity of emotions for their perceived successful teaching,  $F(17, 99) = 21.53$ ,  $p < .01$ ,  $\eta^2 = .78$ , and unsuccessful teaching,  $F(17, 71) = 36.40$ ,  $p < .01$ ,  $\eta^2 = .90$ , in their classes over the current kindergarten

year. Inspection of the scores (Table 2) and the post hoc pairwise comparisons indicated that the teachers experienced intense positive emotions, mainly cheerfulness, exciting, not boredom, confidence, competence and hope, for their perceived successful teaching in their classes teaching in their classes. In contrary, the teachers felt negative emotions, particularly nervousness, dissatisfaction, displeasure and anxiety, for their perceived unsuccessful teaching in their classes.

The results from Anovas, with the perceived teaching (successful / unsuccessful) as between- subjects factor and each of the emotions as dependent variable, showed significant effect. Additionally, Discriminant analysis, with stepwise method, was conducted to determine the set of emotions that best discriminated the two groups of teachers. The results from this analysis (Table 2) confirmed the univariate findings, and, in addition, revealed that: (a) the teachers, who estimated their teaching as successful, compared to teachers, who estimated their teaching as unsuccessful, felt better, particularly in the context (not boredom)-task (cheerfulness, enthusiasm, pleasure)- and goal (satisfaction)- related emotions, that means they felt better in outcome- dependent emotions, (c) the emotion of satisfaction, Cohen's  $d = 1.10$ , discriminating power = .73, followed by the emotions of pleasure, Cohen's  $d = .92$ , discriminating power

According to Cohen (1992), small, medium, and large effect sizes are .20, .50, and .80, respectively.

= .67, cheerfulness, Cohen's  $d = .94$ , discriminating power = .64, and enthusiasm, Cohen's  $d = .94$ , discriminating power = .59, was the most powerful factor in discriminating the successful teaching group of teachers from the unsuccessful teaching group of teachers and (d) ten emotions were found not to further differentiate the one group from the other group of teachers.

The above findings partly confirmed Hypotheses 2a and 2b.

### *Effects of the Intuitive and Attributional Appraisals of Teaching on the Emotions for the Perceived Successful and Unsuccessful Teaching*

The results from correlation analyses (Table 3) and a series of multiple regression analyses, with enter method, in which the intuitive appraisal of the teaching over the current kindergarten year and the subsequent attributional appraisal were the predictive variables and each of the emotions was the predicted variable, within each group of teachers (perceived successful/unsuccessful teaching) (Table 4) revealed the following results.

The teachers' attribution and intuitive appraisals of their teaching over the current kindergarten year were

positively associated with their experienced emotions in their classes in the perceived successful and, mainly, unsuccessful teaching. Specifically, the more successful teaching a teacher had and the more internal, stable, personal controllable and external uncontrollable the subsequent attributions were, the more intense the positive emotions. In contrast, the more unsuccessful teaching a teacher had and the more external, unstable, personal uncontrollable and external controllable the subsequent attributions were, the more intense the negative emotions. Furthermore, the two appraisals of teaching, together, explained a medium and a great amount of the variance of the emotions for the perceived successful teaching,  $R^2$  ranged from .09 to .38, and unsuccessful teaching,  $R^2$  ranged from .28 to .80, respectively. Also, the intuitive and attributional appraisals, in combination, in the perceived successful teaching, explained a greater amount of the variability of the emotions of flow, enthusiasm, not boredom and confidence than they did in the rest of the emotions. In the perceived unsuccessful teaching, the intuitive and attributional appraisals, together, were better predictors of the emotions of unhappiness, non satisfaction, displeasure, not confidence, boredom, incompetence and sadness than of the other emotions.

TABLE 3 CORRELATIONS OF INTUITIVE AND ATTRIBUTIONAL APPRAISALS OF TEACHING WITH THE EMOTIONS FOR THE PERCEIVED SUCCESSFUL AND UNSUCCESSFUL TEACHING OVER THE KINDERGARTEN YEAR

	Successful teaching (n = 116)					Unsuccessful teaching (n = 88)				
	Intuitive appraisal	Locus of causality	Personal controllability	Stability	External controllability	Intuitive appraisal	Locus of causality	Personal controllability	Stability	External controllability
Happiness	.34	--	--	--	-.25	.74	.40	.40	.35	-.52
Satisfaction	.23	--	.28	.25	-.24	.74	.61	.64	.18	-.51
Pleasure	.31	--	--	--	-.31	.73	.61	.48	--	-.23
Pride	.18	--	--	.37	--	.71	.42	.46	.33	-.41
Encouragement	.43	.27	.28	.48	--	.68	.43	.41	.42	-.38
Confidence	.45	.30	.19	.32	-.19	.76	.52	.48	.27	-.43
Calmness	.37	--	.18	--	--	.76	.42	.43	--	-.24
No angry-angry	.30	--	.27	.25	-.20	.68	.48	.49	.33	-.31
Flow– not flow	.56	--	.21	.19	--	.69	.50	.52	.28	-.52
Cheerfulness	.40	--	--	--	--	.74	.39	.35	.35	-.28
Exciting	--	--	.31	--	--	.70	.49	.54	.28	-.49
Not irritated-irritated	.31	--	--	--	--	.64	.55	.44	--	-.43
Hope	.24	--	--	.41	--	.67	.58	.49	.54	--
Competence	--	.33	--	.37	-.30	.70	.53	.47	.46	-.41
Enjoyment	.30	--	--	--	--	.70	.36	.33	.37	-.42
Anxiety	.45	.18	--	--	--	.52	.28	--	.26	-.39
Enthusiasm	.51	--	--	--	--	.63	.44	.36	.43	-.43
Not boredom-boredom	.57	.30	--	.21	--	.65	.56	.52	.53	-.61

Note: successful teaching:  $r > .19$ ,  $p < .01$ ;  $r \leq .19$ ,  $p < .05$ ; unsuccessful teaching:  $r > .26$ ,  $p < .01$ ;  $r \leq .26$ ,  $p < .05$ ; -- =  $p > .05$ .

TABLE 4 RESULTS FROM MULTIPLE REGRESSION ANALYSES FOR THE EFFECTS OF INTUITIVE AND ATTRIBUTIONAL APPRAISALS OF TEACHING ON THE EMOTIONS FOR THE PERCEIVED SUCCESSFUL AND UNSUCCESSFUL TEACHING OVER THE KINDERGARTEN YEAR

Emotions	Predictors	beta	t	F (df)	R <sup>2</sup>
Perceived successful teaching					
Happiness	Intuitive appraisal	.29	3.20	9.40 (2, 113)	.14
	External controllability	.17	--		
Satisfaction	Intuitive appraisal	.23	2.52	6.78 (3, 112)	.15
	Stability	.26	2.91		
Pleasure	External controllability	.13	--	10.45 (2, 113)	.15
	Intuitive appraisal	.24	2.70		
Pride	External controllability	.25	2.77	7.38 (2, 113)	.16
	Intuitive appraisal	.21	2.40		
Encouragement	Stability	.34	3.85	15.00 (4, 111)	.21
	Intuitive appraisal	.35	3.75		
Confidence	Locus of causality	.21	2.54	17.50 (5, 110)	.25
	Personal controllability	.14	--		
Calmness	Stability	.40	5.00	9.96 (2, 113)	.15
	Intuitive appraisal	.42	3.45		
Not anger	Locus of causality	.21	2.95	12.80 (2, 113)	.18
	Personal controllability	.12	--		
Flow	Stability	.35	4.30	28.00 (2, 113)	.32
	Intuitive appraisal	.14	--		
Cheerfulness	External controllability	.35	3.95	25.25 (1, 114)	.18
	Intuitive appraisal	.08	--		
Excitement	Personal controllability	.39	4.45	12.80 (1, 114)	.10
	Intuitive appraisal	.31	3.55		
Not irritation	External controllability	.31	3.50	12.40 (1, 114)	.09
	Intuitive appraisal	.25	2.90		
Hope	Intuitive appraisal	.54	7.10	14.00 (2, 113)	.19
	Stability	.10	--		
Competence	Intuitive appraisal	.40	5.18	9.55 (3, 112)	.20
	Personal controllability	.31	3.70		
Enjoyment	Intuitive appraisal	.31	3.50	11.80 (1, 114)	.09
	Stability	.25	2.90		
Anxiety	Intuitive appraisal	.37	4.15	16.00 (2, 113)	.22
	Stability	.04	--		
Enthusiasm	Intuitive appraisal	.35	3.60	40.60 (1, 114)	.26
	Stability	.51	6.35		
Not boredom	Intuitive appraisal	.54	7.25	13.65 (3, 112)	.38
	Stability	.20	2.35		
Unhappiness	Intuitive appraisal	.03	--	85.60 (5, 82)	.80
	Locus of causality	.89	13.51		
Dissatisfaction	Personal controllability	.40	5.80	52.45 (5, 82)	.76
	Stability	.75	8.00		
Displeasure	External controllability	.018	--	64.10 (4, 83)	.75
	Intuitive appraisal	.50	7.30		
Shame	Locus of causality	.67	9.25	29.00 (5, 82)	.63
	Personal controllability	.42	5.50		
Discouragement	External controllability	.20	--	4.50	--
	Intuitive appraisal	.22	3.70		
Shame	Intuitive appraisal	.33	4.80	8.37	--
	Locus of causality	.79	11.20		
Discouragement	Personal controllability	.62	8.20	4.65	--
	External controllability	.47	4.50		
Shame	Intuitive appraisal	.05	--	4.86	--
	Locus of causality	.74	8.00		
Discouragement	Personal controllability	.43	4.65	3.15	--
	Stability	.48	3.86		
Shame	External controllability	.02	--	7.52	--
	Intuitive appraisal	.27	3.15		

	Locus of causality	.39	4.00	24.60 (5, 82)	.57
	Personal controllability	.50	3.75		
	Stability	.17	2.20		
	External controllability	.21	2.38		
	Intuitive appraisal	.86	11.10		
	Locus of causality	.47	6.25		
Non confidence	Personal controllability	.55	5.40	52.75 (5, 82)	.76
	Stability	.02	--		
	External controllability	.31	4.50		
	Intuitive appraisal	.87	10.00		
Nervousness	Locus of causality	.32	3.50		
	Personal controllability	.36	3.00	41.60 (4, 83)	.66
	External controllability	.03	--		
	Intuitive appraisal	.66	6.70		
Anger	Locus of causality	.35	3.40		
	Personal controllability	.04	--	20.85 (5, 82)	.56
	Stability	.07	--		
	External controllability	.02	--		
	Intuitive appraisal	.67	7.60		
	Locus of causality	.39	4.20		
Not flow	Personal controllability	.39	3.15	29.86 (5, 82)	.64
	Stability	.08	--		
	External controllability	.40	4.68		
	Intuitive appraisal	.89	10.80		
	Locus of causality	.40	4.65		
Sadness	Personal controllability	.63	5.30	24.30 (5, 82)	.68
	Stability	.10	--		
	External controllability	.13	--		
	Intuitive appraisal	.66	7.80		
	Locus of causality	.32	3.40		
Not excitement	Personal controllability	.28	2.20	21.60 (5, 82)	.61
	Stability	.07	--		
	External controllability	.33	3.75		
	Intuitive appraisal	.66	7.65		
Irritation	Locus of causality	.59	6.35		
	Personal controllability	.59	4.73	36.67 (4, 83)	.63
	External controllability	.33	4.10		
	Intuitive appraisal	.64	6.70		
Hopelessness	Locus of causality	.53	5.40		.59
	Personal controllability	.32	2.40		
	Stability	.54	5.34	30.50 (4, 83)	
	Intuitive appraisal	.71	8.30		
	Locus of causality	.50	6.00		
Incompetence	Personal controllability	.52	4.50	39.75 (5, 82)	.70
	Stability	.19	2.81		
	External controllability	.19	2.51		
	Intuitive appraisal	.85	10.30		
	Locus of causality	.40	4.58		
Not enjoyment	Personal controllability	.74	6.92	35.82 (5, 82)	.66
	Stability	.07	--		
	External controllability	.37	4.10		
	Intuitive appraisal	.41	3.90		
Anxiety	Locus of causality	.05	--	9.55 (4, 83)	.28
	Stability	.02	--		
	External controllability	.21	2.30		
	Intuitive appraisal	.69	7.68		
	Locus of causality	.50	5.30		
Not enthusiasm	Personal controllability	.70	5.48	28.22 (5, 82)	.61
	Stability	.17	2.25		
	External controllability	.34	3.95		
	Intuitive appraisal	.54	7.65		
	Locus of causality	.52	7.65		
Boredom	Personal controllability	.54	5.40	55.10 (5, 82)	.77
	Stability	.22	3.80		
	External controllability	.45	6.58		

\* Note: Only the variables that were significantly related to each other were included in the analysis; All F – values are significant at the .01 level of significance; -- not significant contribution in the generation of emotion;  $t > 2.52$ ,  $p < .01$ ,  $t \leq 2.51$ ,  $p < .05$ .

However, while both appraisals of teaching accounted in the variance in the emotions in the perceived successful and unsuccessful teaching group, their relative power in influencing emotions differed between the two groups and within each group. More precisely, the intuitive appraisal of teaching, compared to attributional appraisal of teaching, was a more powerful formulator of most the emotions—mainly, in the perceived unsuccessful teaching-, with the exception in the emotions of hope, pride and competence in the perceived successful teaching, and not enthusiasm and boredom in the perceived unsuccessful teaching. Also, in the perceived successful teaching, the intuitive appraisal of teaching explained a greater amount of the variability of the emotions of not boredom, flow and enthusiasm (followed of the emotions of confidence, not anxiety, encouragement) than it did in the rest of the emotions, while the attributional appraisal was a more powerful formulator of the emotions of encouragement, confidence and competence than of the rest of the emotions. In the perceived unsuccessful teaching, the intuitive appraisal of teaching was a better predictor of the emotions of non confidence, not calmness, sadness, unhappiness and dissatisfaction than of the rest of the emotions, whereas the attributions accounted for a greater amount of variability of the emotions of boredom, not flow, dissatisfaction, irritation, incompetence and non confidence than they did in the rest of the emotions.

Similarly, the relative power of the four attributional dimensions of teaching in influencing emotions differed between the two groups and within each group of teaching. Specifically, both locus of causality and personal controllability, compared to other attributional dimensions, were more strongly related to most of the teachers' emotions for their perceived unsuccessful teaching, while stability, in comparison to any other of the attributional dimensions, was more strongly associated with the majority of the emotions in the perceived successful teaching. Also, locus of causality mainly contributed in the formation of the emotions of dissatisfaction, displeasure, irritation, hopelessness and boredom for the perceived unsuccessful teaching, while it mainly influenced the emotions of not boredom and confidence for the perceived successful teaching. Stability was a better predictor of the emotions of pride, competence, encouragement and hope for the perceived successful teaching, while it best predicted incompetence, discouragement and hopelessness in the perceived

unsuccessful teaching. Personal controllability mainly influenced the emotion of excitement for the successful teaching, and of boredom, sadness and non confidence for the unsuccessful teaching. External controllability mainly contributed in the formation of the emotions of boredom, not flow, unhappiness and dissatisfaction in the perceived unsuccessful teaching, whereas, in the perceived successful teaching was a better predictor of the emotions of happiness, pleasure and competence.

The above findings totally and partly confirmed Hypothesis 3a and Hypotheses 3b and 3c, respectively.

#### *Effects of Intuitive and Attributional Appraisals of Teaching on Teaching Expectations*

The results from multiple regression analyses, with enter method, in which the intuitive appraisal of the teaching over the current kindergarten year and the subsequent attributional appraisal were the predictive variables and teaching expectations was the predicted variable, within each group of teachers (perceived successful / unsuccessful teaching), partly in line Hypothesis 4, revealed the following findings.

In the successful teaching group, intuitive appraisal,  $b = .30$ ,  $t = 4.30$ ,  $p < .01$ , locus of causality,  $b = .32$ ,  $t = 4.30$ ,  $p < .01$ , and, mainly, stability,  $b = .55$ ,  $t = 8.50$ ,  $p < .01$ , positively influenced the generation of teaching expectations,  $R^2 = .55$ ,  $F(3, 114) = 45.70$ ,  $p < .01$ . Thus, the more positively the teaching over the kindergarten year was estimated and the more internal and stable the attributions were, the higher the teaching expectations were.

In the unsuccessful teaching group, intuitive appraisal,  $b = .36$ ,  $t = 4.24$ ,  $p < .01$ , and, mainly, locus of causality,  $b = .43$ ,  $t = 4.98$ ,  $p < .01$ , had positive effects of teaching expectations,  $R^2 = .21$ ,  $F(2, 87) = 8.90$ ,  $p < .01$ . That means that the less negatively the teaching over the kindergarten year was perceived and the more external the attributions were, the higher the chances of better teaching success were.

#### Discussion

The aim of this study was to investigate possible differences between the teachers who perceive their teaching over the kindergarten year either as successful or unsuccessful with respect to subsequent attributions and emotions, and the role of the intuitive and attributional appraisals of teaching in the generation of the emotions and teaching expectations in the perceived successful and unsuccessful teaching group.

The findings in the present research largely confirmed our hypotheses, although some unexpected findings also aroused.

### **Attributions**

The attributional pattern for teaching was predominant as expected. The teachers attributed the perceived quality of their teaching over the kindergarten year to various attributional dimensions, suggesting the high importance of teaching in their ego, since under such conditions individuals search explanations (Schunk et al., 2008; Bless, 2003; Stephanou, 2004, 2005; Trope & Gaunt, 2005; Weiner, 2001). The high importance of achieving good teaching, in association with the desirable good teaching, is also evident in the attributional pattern within- and between- the perceived successful and unsuccessful teaching (see Mullen & Riordan, 1988; Stephanou & Tsapakidou, 2007; Weiner, 1986, 2005).

Specifically, by attributing the perceived successful teaching to personal controllable, stable, external uncontrollable and, mainly, internal attributions, the teachers enhanced themselves and multiplied the chances of good teaching in the future (Forsterling, 1988; Langer, 2005; Stephanou & Sivropoulou, 2008; Weiner, 2001). Similarly, by attributing the perceived unsuccessful teaching to external, personal controllable, external and, mainly, unstable factors, the teachers protected themselves and minimized the possibility of future unsuccessful teaching, and, simultaneously, they stressed the significant role of the children in it (McCormick, Ayres, & Beechey, 2006; Reyna & Weiner, 2001; Stephanou, 2005; Weiner, 2002). The attributional scheme for the perceived unsuccessful teaching is additionally worth notable because attributing it to controllable factors is more motivationally adaptive than to uncontrollable causes (Jesus & Lens, 2005; Rydell & Henricsson, 2004; Weiner, 1995). Furthermore, the teachers, by perceiving their teaching as controllable, are more likely to use problem-focused coping strategies (Roussi, Miller, & Shoda, 2000; Soric, 2009).

The initial teaching expectations might be another explanatory factor of the observed attributions. Presumably, the kindergarten teachers expected to achieve good teaching performance, and its confirmation and disconfirmation contributed in the specific attributions for the perceived successful and unsuccessful teaching, respectively (Caprara, Barbaranelli, Borgogni, & Steca, 2003; Emmer, 1994;

Weiner, 2001; Woods & Jeffrey, 1996).

That locus of causality, followed by stability, was the most powerful attributional dimension in discriminating the group of teachers with the perceived successful teaching from the group of teachers with the perceived unsuccessful teaching may be partly explained by the fact that the teachers estimated their teaching over the kindergarten year, and not just a specific situation.

The low discriminating power of external controllability might reflect, one hand, the women' and kindergarten teachers' 'caring' for their students in any teaching situation (see Emmer, 1994; Woods & Jeffrey, 1996) and, on the other hand, the significant role of factors inside and outside the classroom, such as students and parents (Golby, 1996; Lasky, 2000; Spilt, Koomen, Thijs, 2011). However, research needs to further explore this speculation.

### **Emotions**

The findings with respect to the emotions were in the main consistent with our hypotheses and previous researches, showing that achievement emotions are related to achievement outcome (see Pekrun et al., 2009; Pekrun et al., 2011; Stephanou & Tsapakidou, 2007; Weiner, 1986). It seems, as in the attributions, that achieving good teaching was significant and relevant for the teachers' ego and goals (Frijda, 1993, 2009; Lambert et al., 2009; Roseman & Smith, 2001; Sutton & Wheatley, 2003). It also seems that confirmation / non confirmation of high expectations of good teaching contributed into the generation of the experienced emotions for the perceived successful and unsuccessful teaching (Weiner, 1992, 2002).

Specifically, the teachers experienced various and intense emotions as a function of the perceived quality of their teaching in their classes over the kindergarten year. Furthermore, as compared with the teachers who perceived their teaching as unsuccessful, the teachers who perceived their teaching as successful reported more positive emotions, particularly in goal (satisfaction)-, context (not boredom)- and task (cheerfulness, enthusiasm, pleasure)- related emotions. Considering that teaching is strongly tied with students' learning, these findings, in agreement with other studies (e.g., Buss & Hughes, 2007; Hargeaves, 1998; Sutton, 2000), suggest that the children's learning and progress was a major source of teachers' positive emotions, while children's lack of them influenced moderate negative emotions. Also, children pro-social

and misbehaviour might have been the source of the teachers' emotions for the perceived successful and unsuccessful teaching, respectively (see Erb, 2002; Birch & Ladd, 1997; Sutton & Wheatley, 2003). Previous studies support this argument, documenting that teachers' reports of stress and negative emotions are associated with student misbehaviors (McCormick & Barnett, 2011; Yoon, 2002), and they express negative emotions toward student behaviors (Carson & Templin, 2007; Hamre & Pianta, 2001; Pianta, La Paro, Payne, Cox, & Bradley, 2002).

In addition, while both groups of teachers experienced prospective and retrospective outcome emotions, the teachers with the successful teaching reported more intense positive prospective, such as hope, confidence and competence, than retrospective outcome emotions, such as dissatisfaction and displeasure. On the contrary, the group of teachers with the unsuccessful teaching predominately experienced negative retrospective outcome emotions, such as nervousness, dissatisfaction and displeasure. Closely related to this consideration, and in line with the control-value theory of emotions (Pekrun, 2006; Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010), the teachers experienced activation emotions, such as pleasure and hope in the successful teaching, and anxiety in the unsuccessful teaching group.

It should be mentioned, however, that the experience of some certain negative emotions, such as hopelessness and boredom, for failure reduce motivation and, hence, do not facilitate future good teaching performance (see Pekrun et al., 2010). Similarly, high anxiety can impairs task relevant processing, such as solving the various classroom-based problems that occur every day in school (Ashcraft & Kirk, 2001). Generally, teachers' negative emotions may be distracting from instructional goals and classroom management (Derryberry & Tucker, 1994; Emmer, 1994), they may affect teachers' intrinsic motivation and efficacy beliefs (see Pekrun, Goetz, Titz, & Perry, 2002) as well as they may produce maladaptive attributions for misfortunes (Keltner et al., 1993).

Lack of teachers' intensive negative emotions for their perceived unsuccessful teaching may be related to the nature of this research which focused on their emotions as a function of the teaching performance over the kindergarten year. Additionally, just as the student experience emotions based on the outcome at the task or the activity, so is involved and experience emotions

the teacher (see Frenzel et al., 2009). More specifically, the teachers experienced these specific emotions, since the kindergarten children usually experience moderate to high intense positive emotions in classes (see Stephanou, in press). This finding may also highlight that female teachers, as female students, enjoy classes more than men (Crombie, Pyke, Silverthorn, Jones, & Piccinin, 2003; Do & Schallert, 2004; Harackiewicz, Barron, Tauer, & Elliot, 2002). In addition, probably the kindergarten teachers' caring for their students overcome the possible children's misbehaviour and / or academic problems and, hence, in contrast to other studies in middle school (e.g., Hargreaves, 2000; Sutton, 2000), intense anger and irritation did not arise.

Focusing on the nature of the reported emotions for teaching, the teachers considered the development of their teaching, since, based on Seligman's (2002) view of classification of emotions, they experienced emotions which are related to the past (e.g., pride/shame), the present (e.g., pleasure / displeasure) and the future (e.g., confidence / non confidence, hope/hopelessness). Also, the teachers felt more intense task-, other- and context- related emotions than self- related emotions, in line with previous literature, documenting that teaching is social in nature, and it is related to the students (Lazarus, 1991; Parrrott, 2003; Schutz, Hong, Cross, & Osbon, 2006; Stephanou et al., 2011; Stephanou & Tsapakidou, 2007; Summers & Davis, 2006). This finding might be related to the level of education because teaching in kindergarten is primarily context- than content- related. The gender of the participants may be another explanatory factor, since females are sensitive to class surroundings, as above mentioned. These findings might be also related to the unpredictability of teaching; no one can accurately predict children's behaviour (Nias, 1989).

#### *Effects of Attributional and Intuitive Appraisals of Teaching on Emotions*

The picture regarding the effects of the intuitive and attributional appraisals of teaching on emotions for the perceived successful and unsuccessful teaching over the kindergarten year was in the main as expected. More precisely, in the perceived successful teaching, the more favorably the teachers perceived their teaching and the more internal, personal controllable, external uncontrollable and stable the attributions they made, the more positive the emotions they experienced. On the other hand, in the perceived unsuccessful teaching, the less unfavorably the teachers perceived their teaching and the more external, personal

uncontrollable, unstable and external controllable the attributions they made, the lower the intensity of the negative emotions they felt.

The fact that the appraisals (mainly, attributions) of teaching explained a greater amount of the variance of the emotions for the perceived unsuccessful than successful teaching is in line with the notion that individuals are cognitively involved in their negative than positive experiences (Weiner, 1992, 2001, 2005).

Also, in the perceived successful teaching, the intuitive and attributional appraisals, in combination, predominately influenced the generation of the task (flow, enthusiasm)-, future activity (not boredom)- and future behaviour (confidence)- related emotions. In the perceived unsuccessful teaching, the two appraisals of teaching, together, best predicted the above mentioned (positive) emotions and, in addition, the goal and outcome (dissatisfaction, unhappiness, sadness)-related emotions. This specific finding supports the notion that perceptions of self and task contribute into an emotional experience in a given classroom situation (Boakaerts & Corno, 2005; Pekrun Frenzel, Goetz, & Perry, 2007; Pekrun et al., 2010; Schutz & Lenehart, 2002; Turner & Schallert, 2001). Also, the teachers might have appraised the status of self- factors in pursuing their goals that include achieving good teaching performance in their classes and being good in it, since such emotions are experienced in relationship to goals (Carver & Scheier, 2000; Frijda, 2005, 2009; Linnenbrink & Pintrich, 2002; Pekrun et al., 2009). However, this needs to be further investigated.

Unexpectedly, the intuitive appraisal of teaching, as compared with its attributional appraisal, was the determinant factor in the generation of most of the subsequent emotions (see Stephanou & Tsapakidou, 2007). In line with our hypotheses and Weiner's theory (1992, 2001), the pattern was reverse with the attributions being the powerful formulator of the expectancy (hope)- and self (pride, competence)-related emotions in the perceived successful teaching, and of the task and context (enthusiasm, boredom)-related emotions in the perceived unsuccessful teaching. These findings suggest the differential and the complementary role of the two appraisals of teaching in teachers' various emotions, and the existence of various emotion categories. Research needs to clarify such speculation.

The findings also revealed that, as compared with the rest of the attributional dimensions, both locus of causality and personal controllability were more

strongly related to most of the teachers' emotions for their perceived unsuccessful teaching, while, in the perceived successful teaching, stability proved to be the most powerful factor in the majority of the emotions. These findings are partly consistent with previous literature, and with the notion that each attributional dimension is related to specific kind of emotions (see Weiner, 1992, 1995, 2005, 2006). The teachers, perhaps, valued the good teaching highly, they expected and felt competent to achieve good teaching in their classes over the kindergarten year, and anticipation of failure produced the specific emotions. Conversely, teachers probably felt constant component to master the teaching material, and constant capable to control the teaching activities and the class- related factors through the kindergarten year; accordantly, the emotions for the anticipation of success was related to stability.

However, as expected, stability best predicted the expectancy-related emotions than the rest of the emotions in both groups of teaching, while, partly as expected, locus of causality was best predictor of the goal-, task- and future- related emotions, reflecting the teachers' high beliefs in their ability to manage the classroom teaching-related factors. Similarly, confirming partly our hypotheses, anticipation of personal control induced excitement, while external controllability resulted in task- context- and outcome-related emotions, reflecting the significant role of the classroom- related factors in the teachers' emotional experience.

#### *Effects of Attributional and Intuitive Appraisals of Teaching on Teaching Expectations*

The results from the present study also, confirming partly our hypotheses, revealed that attributions and intuitive appraisal of teaching had unique and complimentarily effect on teaching expectations, leading further support to the earlier findings (see Jesus & Lens, 2005; Stephanou & Tsapakidou, 2007; Weiner, 1992, 2001). Specifically, in the perceived successful teaching group, the better the teaching was perceived, and the more internal and stable the attributions were, the higher the teaching expectations were. In the perceived unsuccessful teaching group, less negatively the unsuccessful teaching was estimated, and the more external the subsequent attributions were, the higher the teaching expectations were.

The fact that stability, as compared to other predictors,

was the most powerful formulator of teaching expectations in the perceived successful but not unsuccessful teaching reflects, probably, the teachers' desire and assurance only for the good teaching. On the other hand, locus of causality was the most powerful predictor of teaching expectation in the unsuccessful teaching hinds, probably, teachers' beliefs that the unsuccessful teaching can become positive only if they can control the situation. However, these need to be further investigated.

Also, unexpectedly, the two appraisals of teaching, in combination, proved a more powerful predictor of the teaching expectations in the perceived successful than unsuccessful teaching, against the previous reports (see Weiner, 2002, 2005). An explanation for this specific finding may be the high importance of good teaching for the teachers, since under such conditions individuals are cognitively evolved in the tasks.

### *Implications of the Findings in Education and Research*

The findings from the present study have implications for educational practice and future research.

The teachers were involved in their teaching cognitively and emotionally, indicating the high importance of teaching for their ego.

The teaching appraisals had significant effects on emotions and teaching expectations. Attributional retraining (Forsterling, 1985; Schunk et al., 2008; Seligman, 2002) may help the teachers to change maladaptive attributional pattern of teaching performance.

The results clearly indicate that a number of various emotions are of critical importance to teachers' classroom teaching. That is why teachers' recognition and regulation of their emotional experience is an essential part of successful teaching (Boekaerts, 2001, 2007; Reyna & Weiner, 2001; Sutton & Mudrey-Camino, 2003). However, teachers experience stress and often they are less successful than they imagine in regulating their emotions and keeping their feelings hidden from students, (Carson & Templin, 2007). Teachers should be aware of the emotional process as well as that emotional expression influences others' (children) behaviour (Clark, Pataki, & Carver, 1996).

The present findings were partly attributed to teachers' self-beliefs and goals. Based on expectancy-related beliefs, program could enhance teachers' competence beliefs to overcome the problem (Dweck, 1999, 2006;

Eccles & Wigfield, 2002; Maddux, 2005).

The context of kindergarten was another explanatory factor for the findings from the present study. Therefore, it is interesting to examine how the contextual classroom factors, such as methods of instruction and children's behaviour, and outside the classroom, such as parents, colleague and school administration, influence teachers' teaching performance, motivation and emotions.

To get a more valid conclusion about the present findings, future investigation should include female and male teachers from various educational levels. It will be also interested to examine the consequences of the present emotional and cognitive pattern on teacher- and children- behaviour, academic development and the between them relationship.

To expand knowledge about teachers' emotions, research should cover measures that extend beyond self-report such as observation or the use of emotions day-to-day diary or recording emotions at random intervals. Emotions are needed to be further examined with respect to how they are displayed and expressed toward children, how they are interpreted by the children, and the history of the teacher-child relationships (Jarvenoja & Jarvela, 2005; Kim, Walden, Harris, Karrass, & Catron, 2007; Schutz et al., 2006; Schutz & Lenehart, 2002; Siemer, Mauss, & Gross, 2007).

It is concluded that investigation on teachers' attributions and emotions for their own classroom teaching could provide useful information in understanding their motivation and behaviour.

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